

ON THE LAND SHELLS OF THE MEXICAN ISLAND OF GUADELUPE,  
COLLECTED BY DR. E. PALMER.

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The island of Guadelupe is about 220 miles from San Diego, off the west coast of Lower California. Its molluscous fauna has for the first time been made known by the researches of Dr. Edward Palmer, who visited it in 1875. He found numerous fragments of snail shells which had been devoured by a species of mouse, the only inhabitant of the island. These fragments appear to belong to *Arionta Rowelli*, Newcomb (see L. & F. W. Sh. of N. A. I. p. 185), a species found in Lower California. Some perfect shells were found, among them a smaller variety. *Arionta facta*, Newcomb, was also found, the variety with open umbilicus, like that form found fossil on San Nicolas Island, California.

The most interesting discovery, however, is that of living specimens of *Binneya notabilis*, a species found also on the California island of Santa Barbara. There is strong reason for believing the Mexican genus *Xanthonyx* to be synonymous with *Binneya*. We may suppose, therefore, that from Mexico the genus has been introduced by the usual means of distribution to this island of Guadelupe, and thence to Santa Barbara. Thus, its presence on the latter island is accounted for, which was not the case when we had only the mainland of California to look to, as its absence there has been proved. So, also, in the case of *Arionta facta*, we may account for its distribution by supposing it to have been introduced from some unknown locality on the mainland to Guadelupe first, and thence to the California islands.

The specimens collected are in the Museum of the Boston Society of Natural History.

Four species of Orthoptera were collected also. One of these is shown by Dr. Scudder to be identical with a Mexican species, and two of the others have also been found at San Diego.